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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/525,885 03/15/00 NUCCIO

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EXAMINER

MCLEWAIN, E

ART UNIT

PAPER NUMBER

1638

DATE MAILED:

07/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/525,885

Applicant(s)

NUCCIO ET AL.

Examiner

Elizabeth McElwain

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-77 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Applicants are reminded that nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute **independent and distinct** inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq.

Upon election of a Group below, Applicant is additionally required to select a single nucleotide sequence, when the group has claims drawn to sequences. This requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of single genus of invention, but constitutes an independent and patentably distinct invention.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-37 and 40-43, drawn to DNA, vectors and host cells, classified in class 536, subclass 23.1, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
- II. Claims 38, 39, 47-58, 60-67, 69 and 70, drawn to a DNA operably linked to a plant promoter sequence, methods of transforming a plant with said sequence and plants transformed with said sequence, classified in class 800, subclass 298, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)

- III. Claim 44, drawn to a eukaryotic cell transformed with a sequence, classified in class 435, subclass 325, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
- 5 IV. Claim 45, drawn to a composition comprising a DNA sequence, classified in class 426, subclass 61, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
- V. Claim 46, drawn to a nucleic acid detection kit comprising a DNA sequence, classified in class 536, subclass 23.1, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
- 10 VI. Claim 59, drawn to a method of detecting PEAMT or delta-PEAMT, classified in class 435, subclass 6, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
- VII. Claim 68, drawn to a method for transforming a plant cell with a claimed DNA and a second gene involved in phosphatidylcholine biosynthesis, classified in class 435, subclass 69.1, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
- 15 VIII. Claim 71, 72 and 75, drawn to a method of improving osmotic stress and cryoprotectant properties by transforming a plant with a claimed DNA and a second gene specified in the claim, classified in class 800, subclass 289, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
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- IX. Claim 73, drawn to a method of improving osmotic stress and cryoprotectant properties by transforming a plant with a claimed DNA and a second gene specified in claim 72 and further treating with ethanolamine, classified in class 514, subclass 1, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)
- X. Claim 74, drawn to a method of improving osmotic stress and cryoprotectant properties by transforming a plant with a claimed DNA and a second gene specified in claim 72 and further transforming the plant with a third gene, classified in class 800, subclass 278, for example. (If this Group is elected, then applicant must also elect a single nucleotide sequence)

The inventions are distinct, each from the other because:

The inventions of Groups I-X are distinct products and methods, wherein one is not required by the other. The DNA of Group I can be used in a method other than for plant transformation of Group II or in the composition of Group IV or the kit of Group V, such as for transforming bacterial cells of Group I; and the eukaryotic cells of Group III are different products than the bacterial cells of Group I and can be used in a different method than producing a transformed plant of Group II, such as in animal cell culture, for example; and the composition, kit, eukaryotic cell and plants of Groups II-V are not required one by the other. The products of Groups I-V are each distinct products one from each of the others that differ chemically, structurally and functionally. In addition, the methods of Groups VI-X differ one

from each of the others in requiring different components and method steps, as well as differing in their starting and end-products. Furthermore, the methods of Groups VI-X are distinct from each of the products of Groups I-V, wherein each of the products does not require any of the methods, and the products can each be used in different methods, such as any of those of Groups VI-X. Thus the inventions of Groups I-X are each capable of being separately made, independently used and the patentability of one would not render the other obvious or unpatentable.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, their recognized divergent subject matter, and the requirement for different areas of search, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (703) 308-1794. The examiner can normally be reached on Tuesday through Friday from 7:30 AM to 5:00 PM. The examiner can also be reached on alternate Mondays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached at (703) 308-4310. The fax phone number for this Group is (703) 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Elizabeth F. McElwain, Ph.D.
July 2, 2001

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ELIZABETH F. McELWAIN
PRIMARY EXAMINER
GROUP 18m

E F McElwain